جمهورية مصر العربية

وزارة التربية والتعليم

مركز تطوير المناهج

والمواد التعليمية

نواتج التعلم لمادة الرياضيات

Learning outcomes for mathematics

(الصف الأول الإعدادى)

(first grade prep)

٢٠١٧ /٢٠١٨ م

Field: numbers and operations on them

..The first criterion: Realize numbers properties and methods of representation and the relationships between them

Evidence and evidence	Evaluation methods	Educational activities	Teaching and learning strategies	Current curriculum content	Learning outcomes (indicators / (practices
*Review teacher preparation book *Check tracts pupils *Oral questions *Note is inhalers *Exercises to be solved, to be implemented in the *Classroom activities *Exercises to be solved, to be implemented *Homework and activities *Completion of the student file (examples of exercises and activities that the student solve with his colleague after (he put them right) * The various activities carried out by the student and the associated real numbers *The results of the monthly tests	*oral questions *editorial questions *note cards *the end of the unit test *Follow-up performance. the pupils	1) solve a set of exercises on the Rational numbers. 2) pupils practiced a range of activities in groups to know the numbers associated with the Rational concepts. 3) solves every pupil set of exercises individually for training on the Rational numbers. 4) The division of students in groups so that each group of two students made up, and asked each student to solve a number of exercises on the relative numbers, provided that the colleague put them right training to learn and evaluate peers, then ask the pupils exchange roles with each other and are under the supervision of the teacher.	1) cooperative learning. 2) presentation and discussion. 3) Brainstorming. 4) discovery. 5) solve problems. 6) Induction and deduction.	.Unit numbers (First semester)	.1) Rational numbers range recognize .2) reads and writes Rational numbers 3) compares the Rational numbers, represented on the number line. 4) converts a number of relatively picture fractional to decimal picture or put it in a percentage. 5) writes the Rational numbers of the image: a × 10 n, where n is an integer ((positive or negative or zero. 6) the foundations laws used to simplify writing Rational numbers. 7) The absolute value of the number of recognize.

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.The second criterion: being calculations skill and understands the relationships between them

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*Review teacher preparation book *Check tracts pupils *Oral questions *Note is inhalers *Exercises to be solved, to be implemented in the *Classroom activities *Exercises to be solved, to be implemented *Homework and activities *Completion of the student file (examples of exercises and activities that the student solve with his colleague after (he put them right) * The various activities carried out by the student and the associated real numbers *The results of the monthly tests	*oral questions *editorial questions *note cards *the end of the unit test *Follow-up performance. the pupils	1- solve a set of exercises on the relative numbers. 2) pupils practiced a range of activities in groups to know the numbers associated with the relative concepts. 3) solves every pupil set of exercises individually for training on the relative numbers. 4) The division of students in groups so that each group of two students made up, and asked each student to solve a number of exercises on the relative numbers, provided that the colleague put them right training to learn and evaluate peers, then ask the pupils exchange roles with each other and are under the supervision of the teacher.	1) cooperative learning. 2) presentation and discussion. 3) Brainstorming. 4) discovery. 5) solve problems. 6) Induction and deduction.	.Unit numbers (First semester)	1) being arithmetic operations (addition, subtraction, multiplication, division) on the relative numbers written in different ways (correct, fractional, decimal.(2) deduce the properties of arithmetic operations (addition, subtraction, multiplication, division) on the relative numbers. 3) solves the sports and lifestyle problems include natural and correct and relative numbers.

The second area: algebra, relationships and functions

..The first criterion: the meaning of each of the border variables and Algebraic understand

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The second criterion: being on the amounts of algebraic operations

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*Review teacher preparation book *Check tracts pupils *Oral questions *Note is inhalers *Exercises to be solved, to be implemented in the *Classroom activities *Exercises to be solved, to be implemented *Homework and activities *Completion of the student file (examples of exercises and activities that the student solve with his colleague after (he put them right) * The various activities carried out by the student and the associated real numbers *The results of the monthly tests	*oral questions *editorial questions *note cards *the end of the unit test *Follow-up performance. The pupils	1- solve a set of exercises on algebra. 2) pupils practiced a range of activities in groups to know the numbers associated with the relative concepts. 3) solves every pupil set of exercises individually for training on the relative numbers. 4) The division of students in groups so that each group of two students made up, and asked each student to solve a number of exercises on the relative numbers, provided that the colleague put them right training to learn and evaluate peers, then ask the pupils exchange roles with each other and are under the supervision of the teacher.	1) cooperative learning. 2) presentation and discussion. 3) Brainstorming. 4) discovery. 5) solve problems. 6) Induction and deduction.	.Unit: algebra (First semester)	.1- Add and subtract similar terms 2- puts the algebric exprisions in its simplest form. 3- Add and subtract algebraic expressions. 4- Put algebraic expressions in simplest form 6- Put algebraic expressions component edged in another component of the double-edged or more. 7 – Factorize and realizes the order to deal with the brackets. 8 – Factorize the amount algebraically using the highest common denominator. 9 - divided fairly algebraic or algebraic exprision as far as algebraic else.

.The third criterion: equations and inequalities recognize the existence of solutions splint and graphic them

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*Review teacher preparation book *Check tracts pupils *Oral questions *Note is inhalers *Exercises to be solved, to be implemented in the *Classroom activities *Exercises to be solved, to be implemented *Homework and activities *Completion of the student file (examples of exercises and activities that the student solve with his colleague after (he put them right) * The various activities carried out by the student and the associated real numbers *The results of the monthly tests	*oral questions *editorial questions *note cards *the end of the unit test *Follow-up performance. the pupils	.1- solve a set of exercises on algebra • • 2) pupils practiced a range of activities • in groups to know the numbers associated .with the relative concepts 3) solves every pupil set of exercises • individually for training on the relative .numbers 4) The division of students in groups so that • each group of two students made up, and asked each student to solve a number of exercises on the relative numbers, provided that the colleague put them right training to learn and evaluate peers, then ask the pupils exchange roles with each other and .are under the supervision of the teacher	1) cooperative • learning . 2) presentation .and discussion 3) .Brainstorming 4) discovery • . 5) solve problems . 6) Induction and • .deduction	.Unit: algebra (Second Semester)	1) the meaning of each of the equation and disparate recognize and associate with .sports and lifestyle attitudes 2 – solve equations and inequalities of the first degree in one variable algebraically for groups of compensation i, w, n. And verify the .validity of the results 3 – represents a simple equations and inequalities of the first class of one variable on the line numbers for .groups of compensation i, w, n 4 – expressed algebraically for a .given relationship are verbal

.Fourth criterion: understand and use patterns, relationships and functions

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*Review teacher preparation book *Check tracts pupils *Oral questions *Note is inhalers *Exercises to be solved, to be implemented in the *Classroom activities *Exercises to be solved, to be implemented *Homework and activities *Completion of the student file (examples of exercises and activities that the student solve with his colleague after (he put them right) * The various activities carried out by the student and the associated real numbers *The results of the monthly tests	*oral questions *editorial questions *note cards *the end of the unit test *Follow-up performance. the pupils	1- solve a set of exercises on .statistics and probability 2) pupils practiced a range of • activities in groups to know the numbers associated with the .relative concepts 3) solves every pupil set of • exercises individually for training .on the relative numbers 4) The division of students in groups so that each group of two students made up, and asked each student to solve a number of exercises on the relative numbers, provided that the colleague put them right training to learn and evaluate peers, then ask the pupils exchange roles with each other and are under the supervision of the teacher	1) cooperative learning . 2) presentation and .discussion 3) .Brainstorming 4) discovery • . 5) solve problems . 6) Induction and deduction	.Unit: algebra (Second Semester)	1- the concept of linear relationship between two variables recognizes and gives a .variety of examples of them 2 - expresses the relations in various forms (verbal, symbolic, .(… ،graphic 3 -uses the relationships in solving mathematical problems .and lifestyle – 4- detects a pattern of sequential numbers (or symbols) and arrive at generalizations about a variety of numerical patterns and are .enriched 5 - Some elements of the sequential numbers are completed according to a .certain pattern

.The third area: Geometry and measurement

.The first criterion: creates two-dimensional and three-dimensional geometric shapes, and shows the properties and analyzes the relationships between them

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*Review teacher preparation book *Check tracts pupils *Oral questions *Note is inhalers *Exercises to be solved, to be implemented in the *Classroom activities *Exercises to be solved, to be implemented *Homework and activities *Completion of the student file (examples of exercises and activities that the student solve with his colleague after (he put them right) * The various activities carried out by the student and the associated real numbers *The results of the monthly tests	*oral questions *editorial questions *note cards *the end of the unit test *Follow-up performance. the pupils	1- solve a set of exercises on the geometry and measurement. 2) pupils practiced a range of activities in groups to know the numbers associated with the relative concepts. 3) solves every pupil set of exercises individually for training on the relative numbers. 4) The division of students in groups so that each group of two students made up, and asked each student to solve a number of exercises on the relative numbers, provided that the colleague put them right training to learn and evaluate peers, then ask the pupils exchange roles with each other and are under the supervision of the teacher.	1) cooperative learning. 2) presentation and discussion. 3) Brainstorming. 4) discovery. 5) solve problems. 6) Induction and deduction.	.Unit Geometric and measurement (First semester)	1- The concept of matching geometric shapes recognize. 2- recognize cases of match triangles, and distinguishes between them.

.The second criterion: Some Geometric transfers applied and used to prove some mathematical relationships

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*Review teacher preparation book *Check tracts pupils *Oral questions *Note is inhalers *Exercises to be solved, to be implemented in the *Classroom activities *Exercises to be solved, to be implemented *Homework and activities *Completion of the student file (examples of exercises and activities that the student solve with his colleague after (he put them right) * The various activities carried out by the student and the associated real numbers *The results of the monthly tests	*oral questions *editorial questions *note cards *the end of the unit test *Follow-up performance. the pupils	1- solve a set of exercises on the geometry and measurement. 2) pupils practiced a range of activities in groups to know the numbers associated with the relative concepts. 3) solves every pupil set of exercises individually for training on the relative numbers. 4) The division of students in groups so that each group of two students made up, and asked each student to solve a number of exercises on the relative numbers, provided that the colleague put them right training to learn and evaluate peers, then ask the pupils exchange roles with each other and are under the supervision of the teacher	1) cooperative learning. 2) presentation and discussion. 3) Brainstorming. 4) discovery. 5) solve problems. 6) Induction and deduction.	.Unit Geometric and measurement (Second Semester)	1- The concept of crossover and Geometric concepts of reflection and transition and rotation recognize for point-and-pieces straight and plane shape. 2- deduce the properties of reflection and transition and rotation in the light of their tariffs. 3- being geometric transformations (reflection, moving, rotation) for some geometric shapes to coordinate level. 4- Computer software is used to explore the models for some Geometric (transfers (reflectance, moving, rotation.

.The third criterion: uses a visual representation and geometric modeling to solve some math problems and non-sporting

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*Review teacher preparation book *Check tracts pupils *Oral questions *Note is inhalers *Exercises to be solved, to be implemented in the *Classroom activities *Exercises to be solved, to be implemented *Homework and activities *Completion of the student file (examples of exercises and activities that the student solve with his colleague after (he put them right) * The various activities carried out by the student and the associated real numbers *The results of the monthly tests	*oral questions *editorial questions *note cards *the end of the unit test *Follow-up performance. the pupils	1- solve a set of exercises on statistics and .probability 2) pupils practiced • a range of activities in groups to know the numbers associated with the relative .concepts 3) solves every • pupil set of exercises individually for training on the .relative numbers 4) The division of students in groups so that each group of two students made up, and asked each student to solve a number of exercises on the relative numbers, provided that the colleague put them right training to learn and evaluate peers, then ask the pupils exchange roles with each other and are under the supervision of the teacher	1) cooperative learning . 2) presentation and .discussion .3) Brainstorming 4) discovery • . 5) solve problems . 6) Induction and deduction	.Unit Geometric and measurement (Second Semester)	1- uses geometric modeling life situations in the process of study and other materials, such as: arts and social sciences and materials . 2- doing some Geometric structures (bisect the angle, drop the column from a point outside the straight known, ...) under certain conditions, and using engineering tools . 3- verify the validity of the .Pythagorean theorem in practice 4- designed flat models can be converted into cut-outs . 5- Computer software used in the design and drawing some geometric shapes .((whenever possible

.Fourth criterion: evidence and logical inference is used to prove the Geometric theories

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.Fourth area: data and statistics and probability analysis

.The first criterion: Collects data and is organized and presented to answer specific questions

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*Review teacher preparation book *Check tracts pupils *Oral questions *Note is inhalers *Exercises to be solved, to be implemented in the *Classroom activities *Exercises to be solved, to be implemented *Homework and activities *Completion of the student file (examples of exercises and activities that the student solve with his colleague after (he put them right) * The various activities carried out by the student and the associated real numbers *The results of the monthly tests	*oral questions *editorial questions *note cards *the end of the unit test *Follow-up performance. the pupils	1- solve a set of exercises on the statistical data. 2) pupils practiced a range of activities in groups to know the numbers associated with the relative concepts. 3) solves every pupil set of exercises individually for training on the relative numbers. 4) The division of students in groups so that each group of two students made up, and asked each student to solve a number of exercises on the relative numbers, provided that the colleague put them right training to learn and evaluate peers, then ask the pupils exchange roles with each other and are under the supervision of the teacher.	1) cooperative learning 2) presentation and discussion. 3) Brainstorming. 4) discovery 5) solve problems 6) Induction and deduction.	.Unit: Statistics (First semester)	1-recognize a variety of sources to obtain statistical data 2-identifies places and groups that collect data and information from them 3-identify methods and tools for data collection 4-formulate and put questions about the phenomenon of intent relating to the compilation of data from within or outside the school. 5-regulates the data in different ways 6-Reads the data graphically represented in different ways and interpret and compares them.

.The second criterion: make judgments on the interpretations and predictions that can be accessed from a particular data analysis

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The third criterion: appreciate the importance of statistics and probability in the areas of knowledge in different life .situations

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